

In the Claims:

Please amend claims 1, 2, 5-8, 10, 30, 32-34, 36 and 37 as indicted below. The status of the claims is as follows:

1. (Currently Amended) A method of manufacturing a reflection type liquid crystal display device, comprising steps of:

(a) forming a distribution of thermal ~~deformation~~ shrinkage characteristics in a thickness direction of a resin layer by irradiating light having exposure energy to an entire surface of the resin layer;

(b) forming undulation at the surface of the resin layer and in a region having said distribution of thermal ~~deformation~~ shrinkage characteristics by performing a heat treatment to the resin layer; and

(c) forming a reflection layer having a surface shape reflecting said undulation shape of said surface of the resin layer on the resin layer.

2. (Currently Amended) A method of manufacturing a reflection type liquid crystal display device, comprising steps of:

(a) irradiating light having exposure energy on a surface of a photo-sensitive resin layer having a predetermined film thickness, to form a distribution of thermal ~~deformation~~ shrinkage characteristics in a thickness direction or a plane direction of the photo-sensitive resin layer; and

(b) performing heat treatment thereafter to the photo-sensitive resin layer to form undulation at the surface of the photo-sensitive resin layer and in a region having said distribution of thermal ~~deformation~~ shrinkage characteristics.

3-4. (Canceled)

5. (Currently Amended) The method of forming a reflection type liquid crystal display device according to Claim 2, wherein the light having said exposure energy in said process (a) is irradiated on the entire surface of the photo-sensitive resin layer to alter the surface, so as to form the distribution of the thermal ~~deformation~~ shrinkage characteristics in the thickness direction of the photo-sensitive resin layer.

6. (Currently Amended) The method of forming a reflection type liquid crystal display device according to Claim 2, wherein the light having said exposure energy in said process (a) is irradiated on a part of the area of the surface of the photo-sensitive resin layer to alter the surface, so as to form the distribution of the thermal ~~deformation~~ shrinkage characteristics in the plane direction of the photo-sensitive resin layer.

7. (Currently Amended) The method of forming a reflection type liquid crystal display device according to Claim 2, further comprising a step of forming separation lines having no thickness or smaller thickness than said photo-sensitive resin layer on said

photo-sensitive resin layer for separating said photo-sensitive resin layer into a plurality of units.

8. (Currently Amended) A method of manufacturing a reflection type liquid crystal display device, comprising steps of

(a) forming a photo-sensitive resin layer having a predetermined film thickness on a substrate having a transistor formed on the surface thereof;

(b) forming a contact hole to an electrode of said transistor by a photolithography process for partially exposing and developing said photo-sensitive resin layer;

(c) post baking to heat said photo-sensitive resin layer to a first temperature;

(d) irradiating light having exposure energy on the surface of said photo-sensitive resin layer, to form distribution of thermal ~~deformation~~ shrinkage characteristics in a thickness direction or a plane direction of the photo-sensitive resin layer; and then

(e) final baking to perform heat treatment at a second temperature higher than said first temperature to said photo-sensitive resin layer, to form undulation at the surface of said photo-sensitive resin layer and in a region having said distribution of thermal ~~deformation~~ shrinkage characteristics.

9. (Canceled)

10. (Currently Amended) The method of forming a reflection type liquid crystal display device according to Claim 8, further comprising a step of exposing or half-exposing and developing said photo-sensitive resin layer with a predetermined pattern, to form separation lines having no thickness or smaller thickness than said photo-sensitive resin layer on said photo-sensitive resin layer for separating said photo-sensitive resin layer into a plurality of units before said step (c).

11. (Original) The method of forming a reflection type liquid crystal display device according to Claim 8, wherein the average inclination angles of said undulation is set to 0° - 15° by controlling the film thickness of the photo-sensitive resin layer in said step (a), time and temperature of post-bake in said step (c), and irradiation energy quantity in said step (d).

12-29. (Canceled)

30. (Currently Amended) A method of manufacturing a reflection type liquid crystal display device where a reflection layer is formed on a substrate via a resin layer, comprising steps of:

distributing thermal ~~deformation~~ shrinkage characteristics at least in one direction of a thickness direction and a plane direction of said resin layer;

performing heat treatment to said resin layer to form undulation at a surface of said resin layer and in a region having said distribution of thermal ~~deformation~~ shrinkage characteristics; and

forming said reflection layer with a surface shape reflecting said undulation of said resin layer on said resin layer,

wherein the distribution of thermal ~~deformation~~ shrinkage characteristics of said resin layer is adjusted and said undulation shape of said resin layer is controlled to be a desired shape.

31. (Canceled)

32. (Currently Amended) The method of manufacturing a reflection type liquid crystal display device according to Claim 30, wherein the exposure time is adjusted to expose said resin layer using an arbitrary mask pattern when the distribution of the thermal ~~deformation~~ shrinkage characteristics of said resin layer is adjusted, so that the film thickness of said resin layer is distributed and said undulation shape of said resin layer is controlled.

33. (Currently Amended) The method of manufacturing a reflection type liquid crystal display device according to Claim 30 or Claim 32 wherein when at least one type of composing elements to be disposed on the surface of said substrate is formed, the

distribution of thermal ~~deformation~~-shrinkage characteristics of said resin layer is adjusted and said undulation shape of said resin layer is controlled using said composing elements by setting at least one of number, shape and arrangement of said composing elements to a desired value.

34. (Currently Amended) A method of manufacturing a reflection type liquid crystal display device comprising a reflection layer formed on a substrate via a resin layer, comprising:

a first step of distributing thermal ~~deformation~~-shrinkage characteristics in at least one direction of a thickness direction and a plane direction of said resin layer;

a second step of forming undulation at a surface of said resin layer and in a region having said distribution of thermal ~~deformation~~-shrinkage characteristics by performing heat treatment to said resin layer; and

a third step of forming said reflection layer, having a surface shape reflecting said undulation of said resin layer, on said resin layer,

wherein said undulation shapes of said resin layer in said third step are controlled by creating a part whose thermal ~~deformation~~-shrinkage characteristics is different from said resin in said resin layer.

35. (Canceled)

36. (Currently Amended) The method of manufacturing a reflection type liquid crystal display device according to Claim 34, wherein said part is formed by forming a resin layer having a predetermined shape with different thermal ~~deformation~~ shrinkage characteristics in said resin layer.

37. (Currently Amended) The method of manufacturing a reflection type liquid crystal display device according to Claim 34, wherein said part having different thermal ~~deformation~~ shrinkage characteristics is formed by performing partial processing on said resin layer.

38. (Original) A method of manufacturing a reflection type liquid crystal display device comprising a reflection layer formed on a substrate via a resin layer, comprising:

a first step of distributing thermal deformation characteristics in said resin layer;

a second step of forming undulation at a surface of said resin layer by performing heat treatment to said resin layer; and

a third step of forming said reflection layer having a surface shape reflecting said undulation of said resin layer on said resin layer,

wherein in said first step, shrinkage factors are distributed in a thickness direction of said resin layer by irradiating light with a predetermined exposure energy on the

surface of said resin layer, and said undulation shape of said resin layer formed by said third step is controlled.

39. (Canceled)

40. (Previously Presented) The method of manufacturing a reflection type liquid crystal display device according to Claim 38, further comprising a fourth step of performing heat treatment to said resin layer before said first step.

41. (Previously Presented) The method of manufacturing a reflection type liquid crystal display device according to Claim 38 or Claim 40 wherein said resin layer is patterned before said first step.

42. (Previously Presented) The method of manufacturing a reflection type liquid crystal display device according to Claim 38 or Claim 40 wherein an undulation pattern is formed on said substrate before said first step.

43-74. (Canceled)